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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SHANG, ANNAN Q

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/590,203	HERZBERG ET AL.	
	Examiner	Art Unit	
	Annan Q Shang	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 6, 11, 16, 17 and 29-33 are rejected under 35 U.S.C. 102(e) as being anticipated by **Satterfield et al (6,564,378)**.

As to claim 1, note the **Satterfield et al** reference figures 3 and 5-10, disclose program guide system with browsing display and further disclose method of providing multilevel information about video-on-demand services (col. 4, lines 39-44 and line 58-col. 5, line 5, note that program guide information or listings includes genres: sports, movies, individual subscription channels, pay-per-view, purchased programs, impulse ordering programs, etc.), comprising the steps:

the claimed “generating a display, on a computer display screen, of a tree having a plurality of nodes and branches interconnecting the nodes and...” met by Processor of Set-top box (STB) 44 or User Television Equipment (TV) 40 (fig. 3 , col. 5, lines 15-23 and lines 44-52), which generates a display on TV display Screen 72 (col. 6, lines 30-37) of program guide information or listings “a tree” such as genres (sports, movies, pay programs, ordering programs, etc.,) (col. 4, line 58-col. 5, line 5) for each program “a

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plurality of nodes,” and video for the channel or program “branches” interconnecting the programs; and

embedding in the programs, video, descriptions, etc., “information” (fig. 5, Windows 76, 78, col. 6, lines 30-37 and lines 53-62) about pay programs, ordering programs, programs that have been purchased, etc., “video-on-demand services” (col. 5, lines 24-42); and

where the Windows 76 and 78 “displayed branches” represent relationships between the nodes and the video, descriptions, etc., embedded in the nodes (col. 6, line 53-col. 7, line 32), note that the channel number 17, 18, 19, etc., represents the relationships between the nodes and the video or description of the highlighted program or node.

As to claim 6, note the **Satterfield et al** reference figures 3 and 5-10, disclose program guide system with browsing display and further disclose system of providing multilevel information about video-on-demand services (col. 4, lines 39-44 and line 58-col. 5, line 5, note that program guide information or listings includes genres: sports, movies, individual subscription channels, pay-per-view, purchased programs, impulse ordering programs, etc.), comprising:

the claimed “a computer display screen,” is met by Display Screen 72 of Set-top box (STB) 44 or User Television Equipment (TV) 40 (fig. 3 and col. 6, lines 30-37)

the claimed “means for generating a display, on a computer display screen, of a tree having a plurality of nodes and branches interconnecting the nodes and...” met by Processor of Set-top box (STB) 44 or User Television Equipment (TV) 40 (fig. 3, col. 5,

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lines 15-23 and lines 44-52), which generates a display on TV display Screen 72 (col. 6, lines 30-37) of program guide information or listings “a tree” such as genres (sports, movies, pay programs, ordering programs, etc.,) (col. 4, line 58-col. 5, line 5) for each program “a plurality of nodes,” and video for the channel or program “branches” interconnecting the programs; and

embedding in the programs, video, descriptions, etc., “information” (fig. 5, Windows 76, 78, col. 6, lines 30-37 and lines 53-62) about pay programs, ordering programs, programs that have been purchased, etc., “video-on-demand services” (col. 5, lines 24-42); and

where the Windows 76 and 78 “displayed branches” represent relationships between the nodes and the video, descriptions, etc., embedded in the nodes (col. 6, line 53-col. 7, line 32), note that the channel number 17, 18, 19, etc., represents the relationships between the nodes and the video or description of the highlighted program or node.

As to claim 11, note the **Satterfield et al** reference figures 3 and 5-10, disclose program guide system with browsing display and further disclose a program storage device readable by machine, tangibly embodying a program of instructions executable by a machine to perform method steps for providing multilevel information about video-on-demand services (col. 4, lines 39-44 and line 58-col. 5, line 5, note that program guide information or listings includes genres: sports, movies, individual subscription channels, pay-per-view, purchased programs, impulse ordering programs, etc.), comprising the steps:

the claimed “generating a display, on a computer display screen, of a tree having a plurality of nodes and branches interconnecting the nodes and...” met by Processor of Set-top box (STB) 44 or User Television Equipment (TV) 40 (fig. 3, col. 5, lines 15-23 and lines 44-52), which generates a display on TV display Screen 72 (col. 6, lines 30-37) of program guide information or listings “a tree” such as genres (sports, movies, pay programs, ordering programs, etc.,) (col. 4, line 58-col. 5, line 5) for each program “a plurality of nodes,” and video for the channel or program “branches” interconnecting the programs; and

embedding in the programs, video, descriptions, etc., “information” (fig. 5, Windows 76, 78, col. 6, lines 30-37 and lines 53-62) about pay programs, ordering programs, programs that have been purchased, etc., “video-on-demand services” (col. 5, lines 24-42); and

where the Windows 76 and 78 “displayed branches” represent relationships between the nodes and the video, descriptions, etc., embedded in the nodes (col. 6, line 53-col. 7, line 32), note that the channel number 17, 18, 19, etc., represents the relationships between the nodes and the video of the highlighted program.

As to claim 16, Satterfield further discloses where the tree is displayed top down (figs 5-10), note that the top of the tree is channel 17 any leading channel based on the program requests, pay programs or the list of programs which can be ordered.

As to claim 17, note the **Satterfield et al** reference figures 3 and 5-10, disclose program guide system with browsing display and further disclose “an article of manufacture comprising a computer usable medium having computer readable...” the

claimed “computer readable code means for causing a computer to affect the steps of...” is met as previously discussed with respect to claim 1.

As to claim 29, note the **Satterfield et al** reference figures 3 and 5-10, disclose program guide system with browsing display and further disclose method of providing multilevel information about video-on-demand services (col. 4, lines 39-44 and line 58-col. 5, line 5, note that program guide information or listings includes genres: sports, movies, individual subscription channels, pay-per-view, purchased programs, impulse ordering programs, etc.), comprising the steps:

the claimed “generating a display, on a computer display screen, of a tree having a plurality of nodes and branches interconnecting the nodes and...” met by Processor of Set-top box (STB) 44 or User Television Equipment (TV) 40 (fig. 3, col. 5, lines 15-23 and lines 44-52), which generates a display on TV display Screen 72 (col. 6, lines 30-37) of program guide information or listings “a tree” such as genres (sports, movies, pay programs, ordering programs, etc.,) (col. 4, line 58-col. 5, line 5) for each program “a plurality of nodes,” and video for the channel or program “branches” interconnecting the programs; and

embedding in the programs, video, descriptions, etc., “information” (fig. 5, Windows 76, 78, col. 6, lines 30-37 and lines 53-62) about pay programs, ordering programs, programs that have been purchased, etc., “video-on-demand services” (col. 5, lines 24-42); and

where the Windows 76 and 78 “displayed branches” represent relationships between the nodes and the video, descriptions, etc., embedded in the nodes (col. 6, line

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53-col. 7, line 32), note that the channel number 17, 18, 19, etc., represents the relationships between the nodes and the video or description of the highlighted program or node.

As to claim 30, Satterfield further discloses VOD or PPV related entities such as VOD providers, Per-pay-view providers (col. 4, lines 39-44 and line 58-col. 5, line 5)

As to claim 31, note the **Satterfield et al** reference figures 3 and 5-10, disclose program guide system with browsing display and further disclose "an article of manufacture comprising a computer usable medium having computer readable..." the claimed "computer readable code means for causing a computer to affect the steps of..." is met as previously discussed with respect to claims 29 and 30.

As to claims 32 and 33, Satterfield further discloses were the VOD or PPV resources are groups of products and inventory information (col. 4, lines 39-44 and line 58-col. 5, line 5).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-5, 7-10, 12-15 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Satterfield et al (6,564,378)** in view of **Reynolds et al (6,563,515)**.

As to claims 2-5, Satterfield teaches embedding video and description "detailed information" of each program or node (col. 7, lines 3-20) including rating, critics rating, paying information, etc. (col. 4, line 58-col. 5, line 5), polls STBs 44 periodically for certain information (col. 5, lines 33-52), but fails to explicitly teach identifying a first and second catalog of a first and second group of aspects of VOD services, forming a matrix from the first and second groups identifying in a first catalog each of a group of first

However, note **Reynolds et al** reference figures 5-9, disclose a VOD program guide, which includes identifying a first and second catalog of a first and second group of aspects of VOD services (col. 12, lines 41-55), note that the VOD programs may be organized according to certain categories, such as "recent releases," "sitcoms," "action/adventure," "comedy," etc., which can be accessed by navigating Remote Control (RC) 50 to the desired category, note further that a matrix is formed from each category, such that each program listed in the list of programs in a given category includes, besides, the program title 94 (Bullworth), run-time of the program 96 and the rating 98 (TV-MA), note that more detailed information embedded in the form of a matrix or matrices, which can be accessed by pressing the info key 61 on RC 50 on a selected program.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Reynolds into the system of Satterfield to identify the catalogs of different groups of VOD programs listing to enable the user to differentiate between the various VOD listings to request for a desired VOD program.

Claims 7-10 are met as previously discussed with respect to claims 2-5.

Claims 12-15 are met as previously discussed with respect to claims 2-5.

Claim 34 is met as previous discussed with respect to claim 2-5.

5. Claims 18-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Rowe et al (5,623,613)** in view of **Satterfield et al (6,564,378)**.

As to claim 18-22, note the **Rowe et al** reference figures 1-8, disclose a system for retrieving and displaying programming information in response to selection of a category of programming information and further disclose method for representing interconnections of plurality of elements of video-on-demand system (fig. 1 and col. 6, lines 13-40, note that the subscriber requests for programs and program information), the method comprising:

the claimed "providing a first catalog for a first subset of elements, and providing a second subset of the elements," is met by Set-top Converter (STC) 32 (fig. 1 and col. 6, lines 42-61), which includes a processors and storage and receives programs and program information from cable 30 and converts to format compatible for presentation, such as providing Sports "a first catalog" for Categories Display 54 "a first subset of elements" (figs. 5-8 and col. 9, lines 47-67), and providing Basketball "a second catalog" for Categories 56 "a second subset" of Categories Display 54, note that Categories Display 54 can display other Sports besides basketball on ESPN on Display 38 or Receiving Unit 34 (col. 10, lines 1-37); and creates Sports and Sub-Sports or categories and subcategories "a matrix of connections cells" each cell forming by intersection of SPORTS and sub-SPORTS or categories and subcategories "pair of

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elements” where a Basketball “first element of the pair” is taken from SPORTS and NCAA 04 ABC “a second element of each pair” is taken from Basketball and forming a connection for at least a subset of the pairs (col. 10, lines 1-37 and Table 1), note further that Sports and Sub-Sports or categories and subcategories and associated channels also forms the matrix of connections cells, which enables a user to select an intersection cell, such as NCAA 04 ABC to tune to the program.

Rowe fails to explicitly teach forming a connection representation for at least a subset of the pairs, the connection representation for each cell represents a relationship between the elements forming the cell.

However, note **Satterfield et al** reference disclose a program guide system with browsing display and ordering or purchasing of programs where the listing of programs is provided in a matrix, which forms a connection representation of at least a subset of pairs where the connection representation for each cell, such as Video for Channel 17 and Description for Channel 19 (fig. 6, Window 76 and 78) represents a relationship between the elements forming the cell (col. 7, lines 3-32, lines 33-54 and col. 8, lines 15-37), note that the channel number 17, 18, 19, etc., represents the relationships between the channel(s) or program tile or cell and the video or description of the highlighted program cell or tile.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Satterfield into the system of Rowe to display a relationships between each channel representation to enable the user to relate

to the different programs being presented on each channel and order or request for the program accordingly.

As to claim 23, Rowe further employs a wizard within the software program of the STB to form a subset of elements within the Category (col. 6, lines 50-61).

As to claim 24, note the **Rowe et al** reference figures 3 and 5-10, disclose program guide system with browsing display and further disclose "an article of manufacture comprising a computer usable medium having computer readable..." the claimed "computer readable code means for causing a computer to affect the steps of..." is met as previously discussed with respect to claim 18.

As to claim 25, note the **Rowe et al** reference figures 1-8, disclose a system for retrieving and displaying programming information in response to selection of a category of programming information and further disclose an architecture (fig. 1 and col. 6, lines 13-40, note that the subscriber requests for programs and program information), comprising:

the claimed "a matrix module forming a video-on-demand information system matrix having at least one matrix row element and at least one matrix column element,.." is met by Figures 2, 3 and Table 1 (col. 9, line 47-col. 10, line 14 and col. 11, line 10+) note that Set-top Converter (STC) 32 (fig. 1 and col. 6, lines 42-61), includes a processors and storage and receives programs and program information from cable 30 and converts to format compatible for presentation, creates Sports and Sub-Sports or categories and subcategories "at least one matrix row element" and Vertical elements under Category, such as Animated, Awards, Children, Game Shows, Sports Events,

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etc., "at least one matrix column element" each row and column elements forming a matrix cell of intersection of SPORTS and sub-SPORTS or categories and subcategories (col. 10, lines 1-37 and Table 1);

the claimed "a set of video-on-demand elements for a first subset of the set having connection requirement with a second subset of the set;" is met by Sports "a set of video-on-demand elements" for Categories Display 54 "a first subset" of Sports (figs. 5-8 and col. 9, lines 47-67), and having a connection requirement with Basketball "a second subset" of Categories Display 54, note the subscriber requests for programs and programming information via Headend processor 14 (col. 6, lines 20-24) and Categories Display 54 can display other Sports besides basketball on ESPN on Display 38 or Receiving Unit 34 (col. 10, lines 1-37); the Sports "first catalog" including Sub-Sports, such as Basketball, Boxing, Wrestling, etc., "at least a video-on-demand elements" forming the at least one matrix row element and Basketball "a second catalog" for Categories 56 including, Sports Non-Event, Sports Talk, NCAA, Boxing, Wrestling, etc., video-on-demand element" forming at least one matrix column element (Table 1 and col. 10, line 49-col. 11, line 1+), note further that Sports and Sub-Sports or categories and subcategories and associated channels also forms a matrix of connections cells, which enables a user to select an intersection cell, such as NCAA 04 ABC to tune to the program.

Rowe fails to explicitly teach where the matrix cell represents a VOD relationship between each VOD element of the first catalog and each VOD element of the second

catalog to enable systematic corporation among VOD elements according to a VOD requirement.

However, note **Satterfield et al** reference disclose a program guide system with browsing display and ordering or purchasing of programs where the listing of programs is provided in a matrix, which forms a connection representation of at least a subset of pairs where the connection representation for each cell, such as Video for Channel 17 and Description for Channel 19 (fig. 6, Window 76 and 78) represents a relationship between the elements forming the cell (col. 7, lines 3-32, lines 33-54 and col. 8, lines 15-37), note that the channel number 17, 18, 19, etc., represents the relationships between the channel(s) or program tile or cell and the video or description of the highlighted program cell or tile.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Satterfield into the system of Rowe to display a relationships between each channel representation to enable the user to relate to the different programs being presented on each channel and order or request for the program accordingly.

As to claims 26 and 27, Rowe further discloses where at least one VOD element is a catalog or category of VOD sub-elements and also peripherally related to VOD (col. 7, lines 16-44 and line 62-col. 8, line 6).

As to claim 28, Rowe further discloses where the category elements only related to VOD includes an item from group including customer habits, internet purchases,

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product, etc. (col. 6, lines 13-49), note that the user can request or order a program and programming information.

Response to Arguments

6. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection. The amendment to all the independent claims necessitated the new ground(s) of rejections discussed above. This office action is made Final.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Finseth et al (6,754,906) disclose categorical electronic program guide.

Schein et al (6,732,369) disclose systems and methods for contextually linking television program information.

Hanaya et al (6,519,009) disclose program switching device and method.

Nikolovska et al (6,281,898) disclose spatial browsing approach to multimedia information retrieval.

Alexander et al (6,177,931) disclose systems and methods for displaying and recording control interface with television programs, video, advertising information and program scheduling information.

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q Shang** whose telephone number is **703-305-2156**. The examiner can normally be reached on **700am-500pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W Miller** can be reached on **703-305-4795**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC)** at 866-217-9197 (toll-free).



Annan Q. Shang.



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